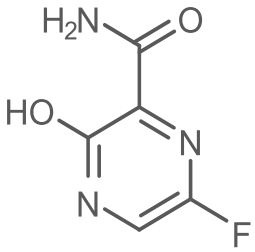
Product Name	:	Favipiravir
Catalog Number	:	T6833
CAS Number	:	259793-96-9
Molecular Formula	:	C5H4FN3O2
Molecular Weight	:	157.10



Description: Favipiravir (T-705), an effective and selective RNA-dependent RNA polymerase inhibitor, are applied to treat influenza virus infections.
Storage: 2 years -80°C in solvent; 3 years -20°C powder;

Solubility

DMSO	29 mg/mL (184.6 mM)
Ethanol	12 mg/mL (76.4 mM)
Water	5 mg/mL (31.82 mM), warmed

(< 1 mg/ml refers to the product slightly soluble or insoluble)

Receptor (IC50)

RNA-dependent RNA polymerase

In vitro Activity

Favipiravir shows anti-influenza virus activities with IC50 ranged from 0.013 to 0.48 μg/ml for the influenza A viruses, from 0.039 to 0.089 μg/ml for the influenza B viruses, and from 0.030 to 0.057 μg/ml for the influenza C viruses. In mammalian cell lines (MDCK cells, Vero cells, HEL cells, A549 cells, HeLa cells, and HEp-2 cells), Favipiravir shows no cytotoxicity at concentrations up to 1,000 μg/ml. [1] In MDCK cells inoculated with seasonal influenza A (H1N1) viruses, Favipiravir induces lethal mutagenesis. [2]

In vivo Activity

In influenza virus-infected mice, Favipiravir (200 mg/kg/day, p.o.) protects the mice from death from influenza virus infection. [1] In mice experimentally infected with Ebola virus, Favipiravir efficiently blocks viral production, reaching an antiviral effectiveness of 95% and 99.6% at 2 and 6days after initiation of treatment, respectively. [3]

Cell Assay

The cytotoxicity of T-705 is evaluated by an assay with XTT. XTT is converted to aqueous formazan by an enzyme in MDCK cells, Vero cells, HEL cells, A549 cells, HeLa cells, and HEp-2 cells. The compounds are diluted to the appropriate concentrations (volume, 100 μl) with test medium (EMEM containing 10% FCS) in 96-well culture plates in which each well contains a concentration of 2 × 103 cells/100 μL. The test plates are incubated for 3 days at 37°C in 100% humidity and 5% CO2. After 3 days, 50 μl of the XTT reagent (1 mg/ml in FCS-free EMEM containing 5 mM phenazine methosulfate) is added, and the reaction product is assayed by measurement of the absorbance at 450 nm with a microplate reader. Cytotoxicity is expressed as the 50% cell-inhibitory concentration (CC50).(Only for Reference)

Cell line: MDCK cells, Vero cells, HEL cells, A549 cells, HeLa cells, and HEp-2 cells

Animal Experiment

Animal Model: Mice infected with influenza virus A/PR/8/34

Reference

1. Furuta Y, et al. Antimicrob Agents Chemother. 2002, 46(4), 977-981.
2. Baranovich T, et al. J Virol. 2013, 87(7), 3741-3751.
3. Madelain V, et al. Antiviral Res. 2015, 123, 70-77.

Information for product storage and handling is indicated on the product datasheet. Targetmol products are stable for long term

under the recommended storage conditions. Our products may be shipped under different conditions as many of them are stable in the short-term at higher or even room temperatures. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, please follow the storage recommendations on the product data sheet.